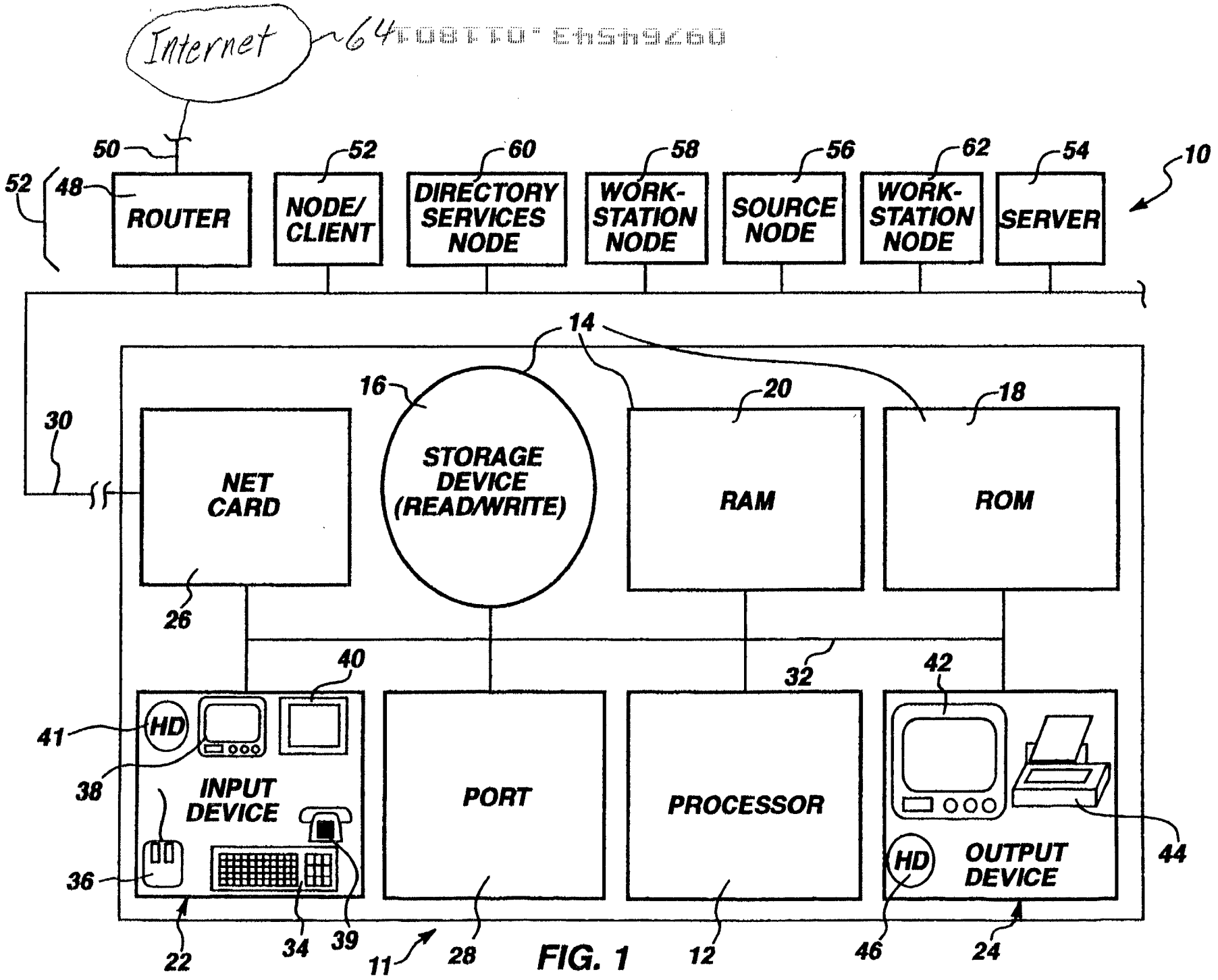
Internet
64
50
52
48
52
60
58
56
62
54
10
ROUTER
NODE/ CLIENT
DIRECTORY SERVICES NODE
WORK-STATION NODE
SOURCE NODE
WORK-STATION NODE
SERVER
14
16
20
18
30
NET CARD
STORAGE DEVICE (READ/WRITE)
RAM
ROM
26
40
32
42
41
HD
38
INPUT DEVICE
PORT
PROCESSOR
36
HD
OUTPUT DEVICE
44
22
34
39
11
28
12
46
24

FIG. 1

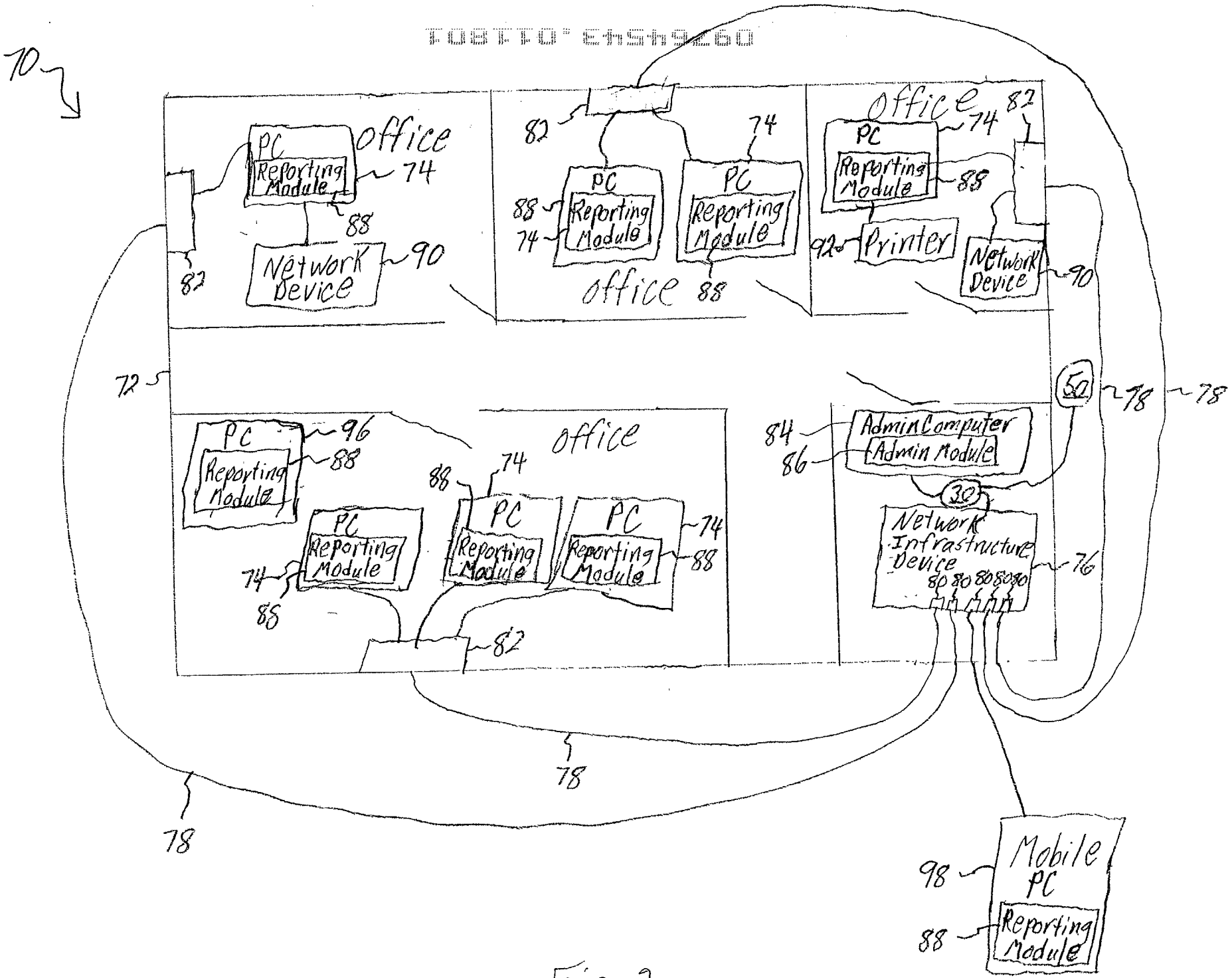
70
Office
PC
Reporting Module
74
88
Network Device
90
82
Office
82
74
PC
Reporting Module
88
74
PC
Reporting Module
Office
88
Office
82
74
PC
Reporting Module
85
92
Printer
Network Device
90
72
50
78
78
PC
96
Reporting Module
88
Office
88
74
PC
Reporting Module
74
85
PC
Reporting Module
PC
Reporting Module
74
88
82
84
Admin Computer
Admin Module
86
30
Network Infrastructure Device
80 80 80 80 80
76
78
78
Mobile PC
98
88
Reporting Module

Fig 2

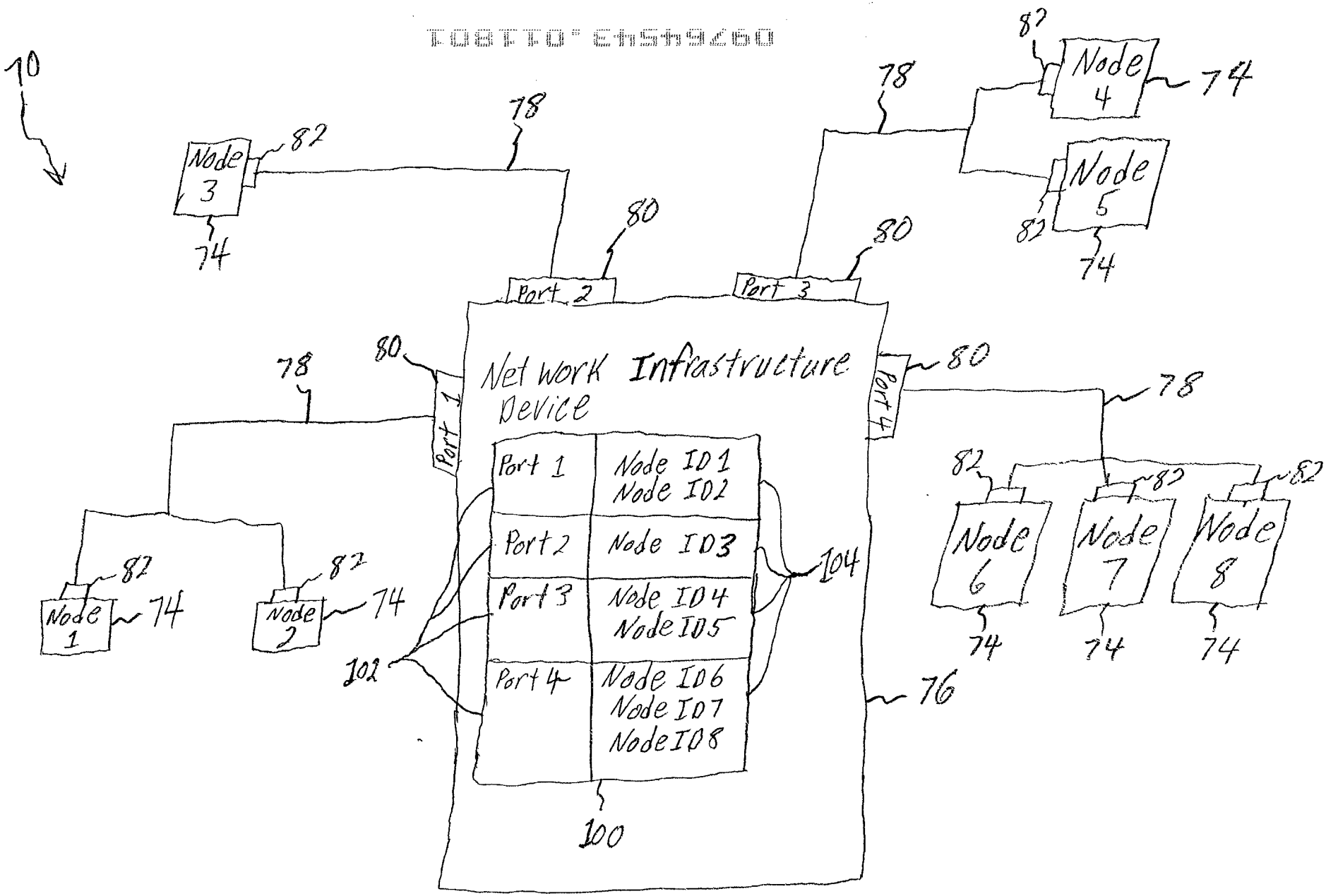
10
Node 1
Node 2
Node 3
Node 4
Node 5
Node 6
Node 7
Node 8
74
78
80
82
Port 1
Port 2
Port 3
Port 4
Network Infrastructure Device
Port 1
Node ID1
Node ID2
Port 2
Node ID3
Port 3
Node ID4
Node ID5
Port 4
Node ID6
Node ID7
Node ID8
100
102
104
76

Fig. 3

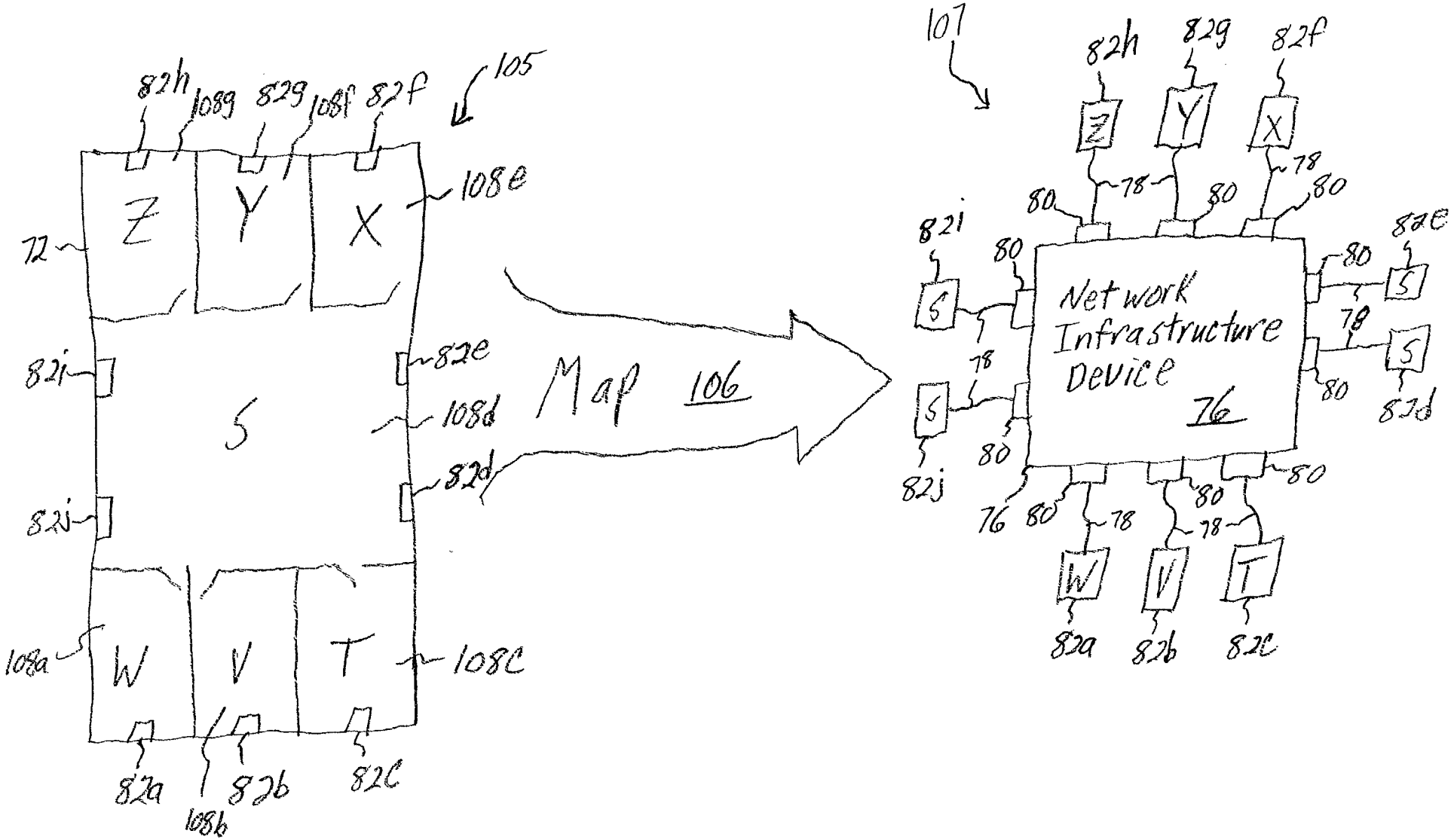
105
82h
108g
82g
108f
82f
108e
72
Z
Y
X
82i
82e
S
108d
82d
82j
108a
W
V
T
108c
82a
82b
82c
108b
Map 106
107
82h
82g
82f
Z
Y
X
78
80
82i
82e
S
Network Infrastructure Device 76
82j
82d
82a
82b
82c

Fig. 4

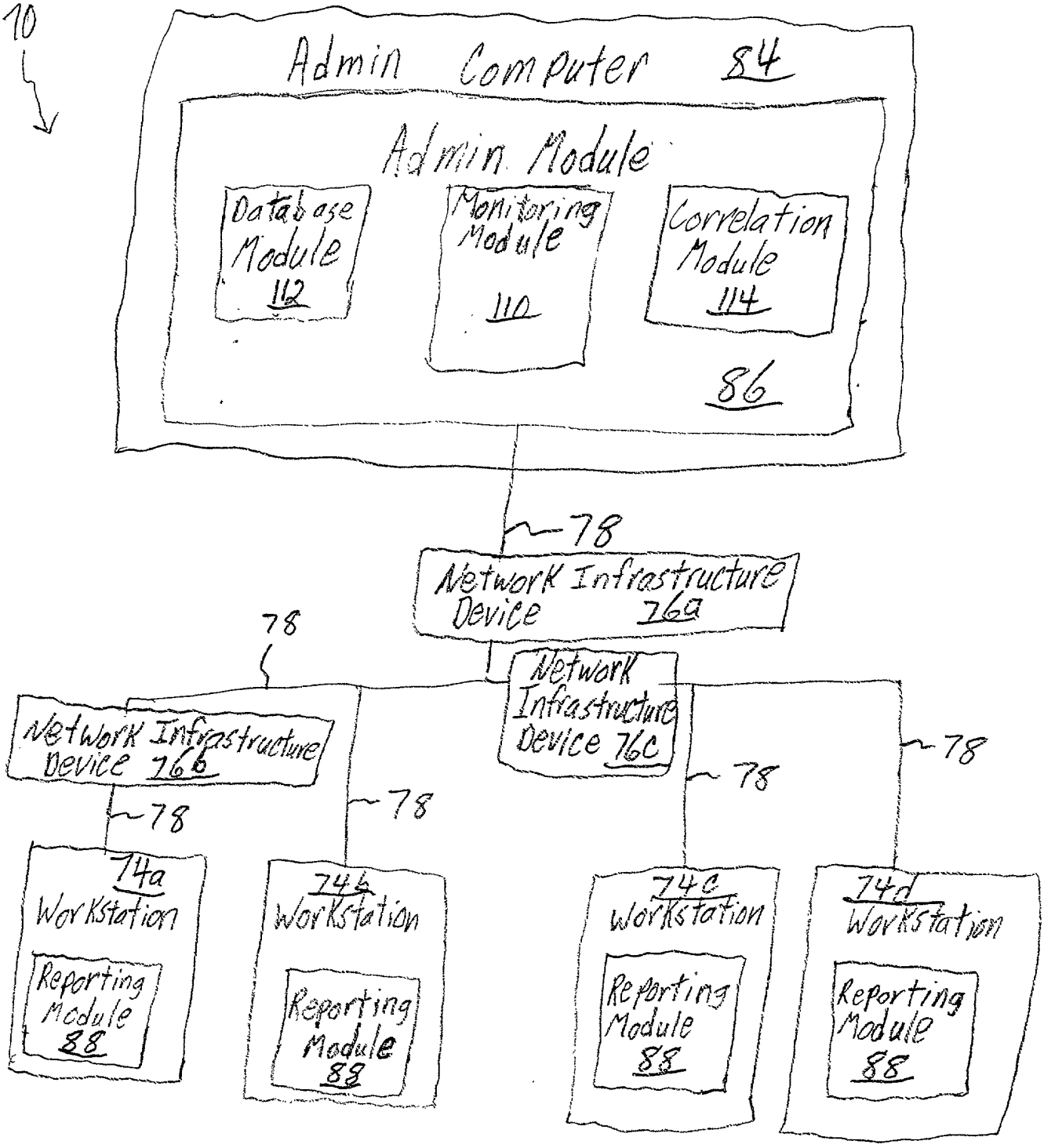
10
Admin Computer 84
Admin Module
Database Module 112
Monitoring Module 110
Correlation Module 114
86
78
Network Infrastructure Device 76a
Network Infrastructure Device 76b
Network Infrastructure Device 76c
74a Workstation
Reporting Module 88
74b Workstation
Reporting Module 88
74c Workstation
Reporting Module 88
74d Workstation
Reporting Module 88

Fig 5

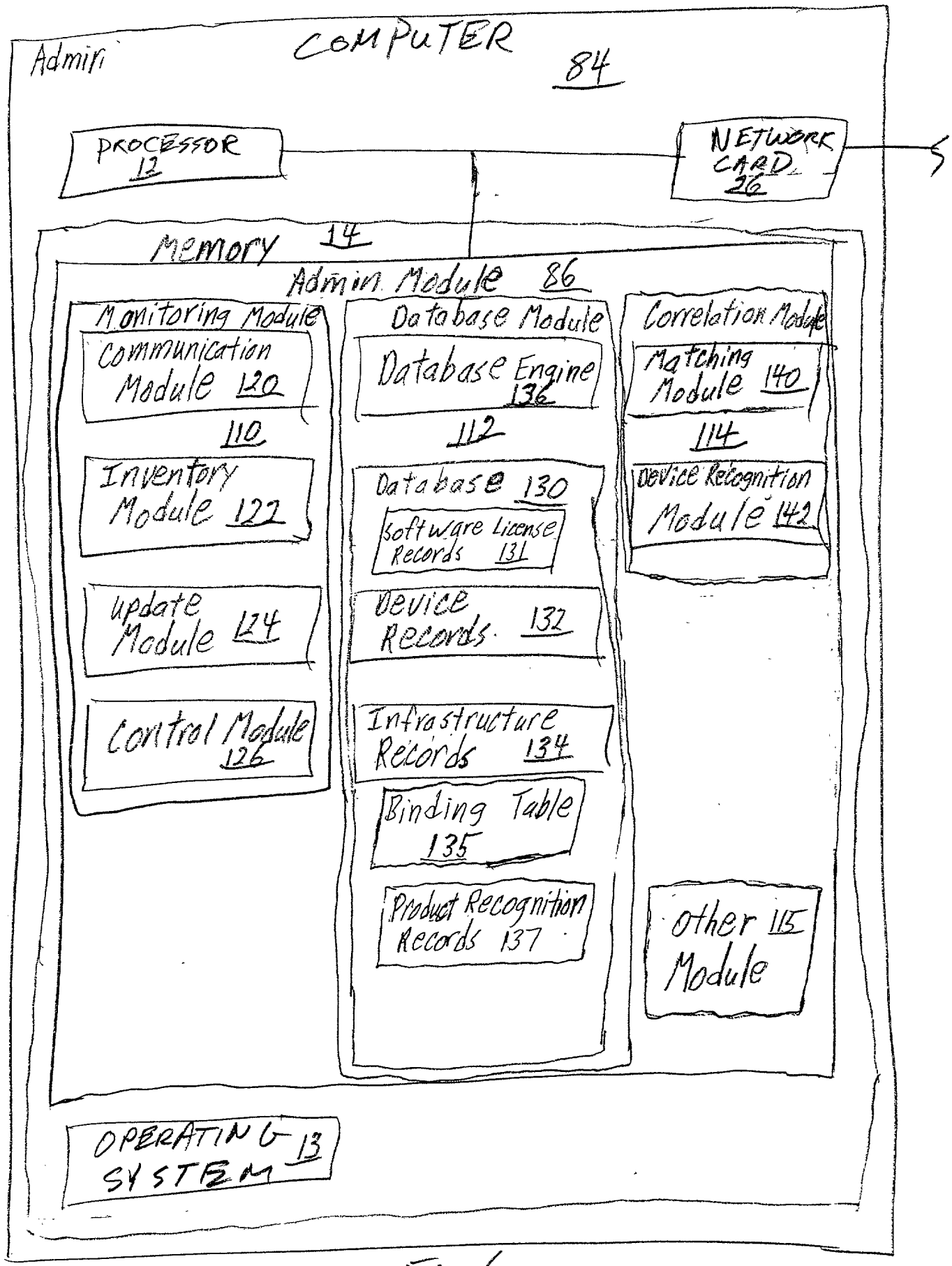
Admin
COMPUTER
84
PROCESSOR
12
NETWORK CARD
26
5
Memory 14
Admin Module 86
Monitoring Module
Communication Module 120
110
Inventory Module 122
Update Module 124
Control Module 126
Database Module
Database Engine 136
112
Database 130
Software License Records 131
Device Records 132
Infrastructure Records 134
Binding Table 135
Product Recognition Records 137
Correlation Module
Matching Module 140
114
Device Recognition Module 142
Other 115 Module
OPERATING SYSTEM 13

Fig. 6

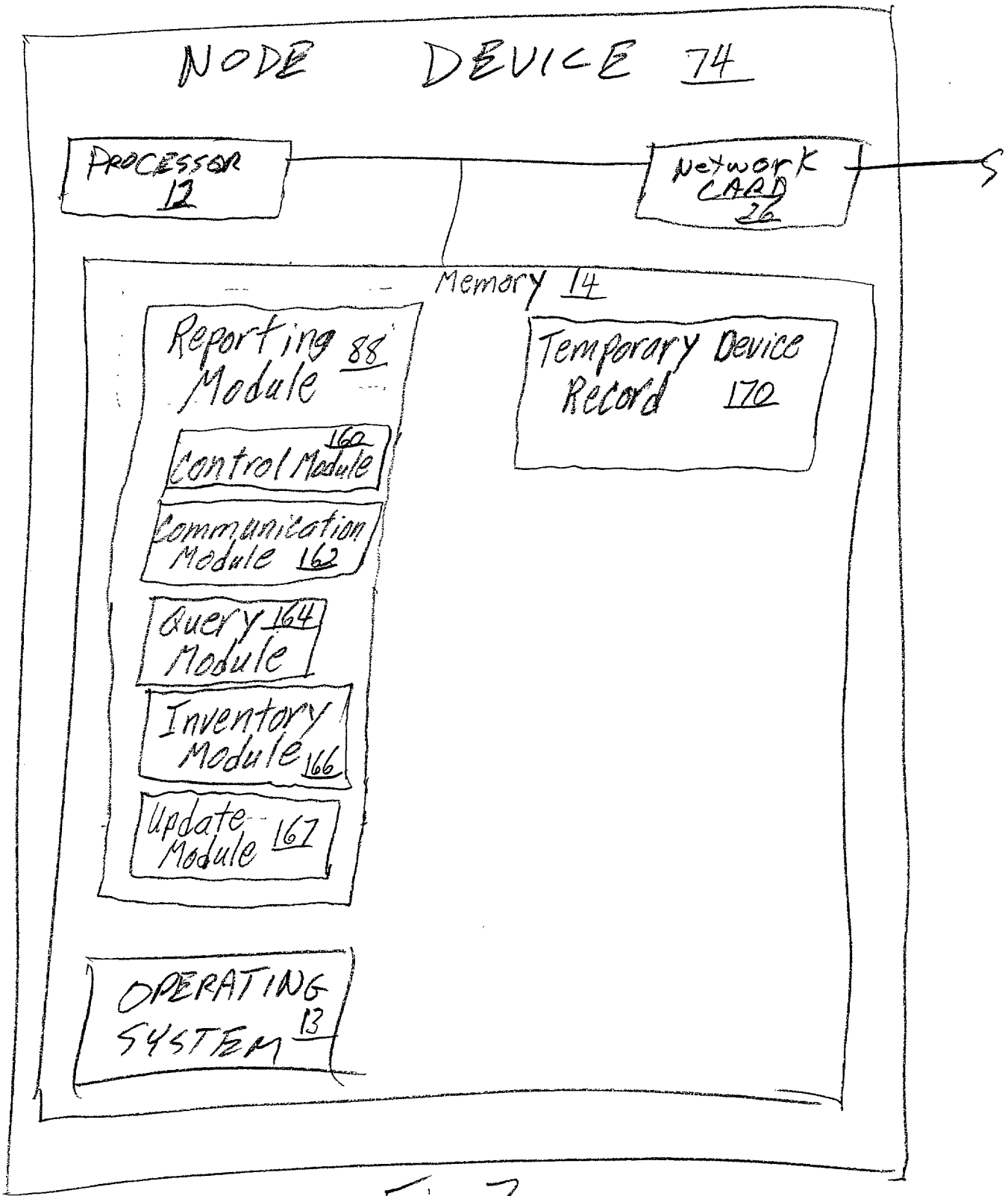
NODE DEVICE 74
PROCESSOR 12
Network CARD 26
S
Memory 14
Reporting Module 88
Control Module 160
Communication Module 162
Query Module 164
Inventory Module 166
Update Module 167
Temporary Device Record 170
OPERATING SYSTEM 13

Fig. 7

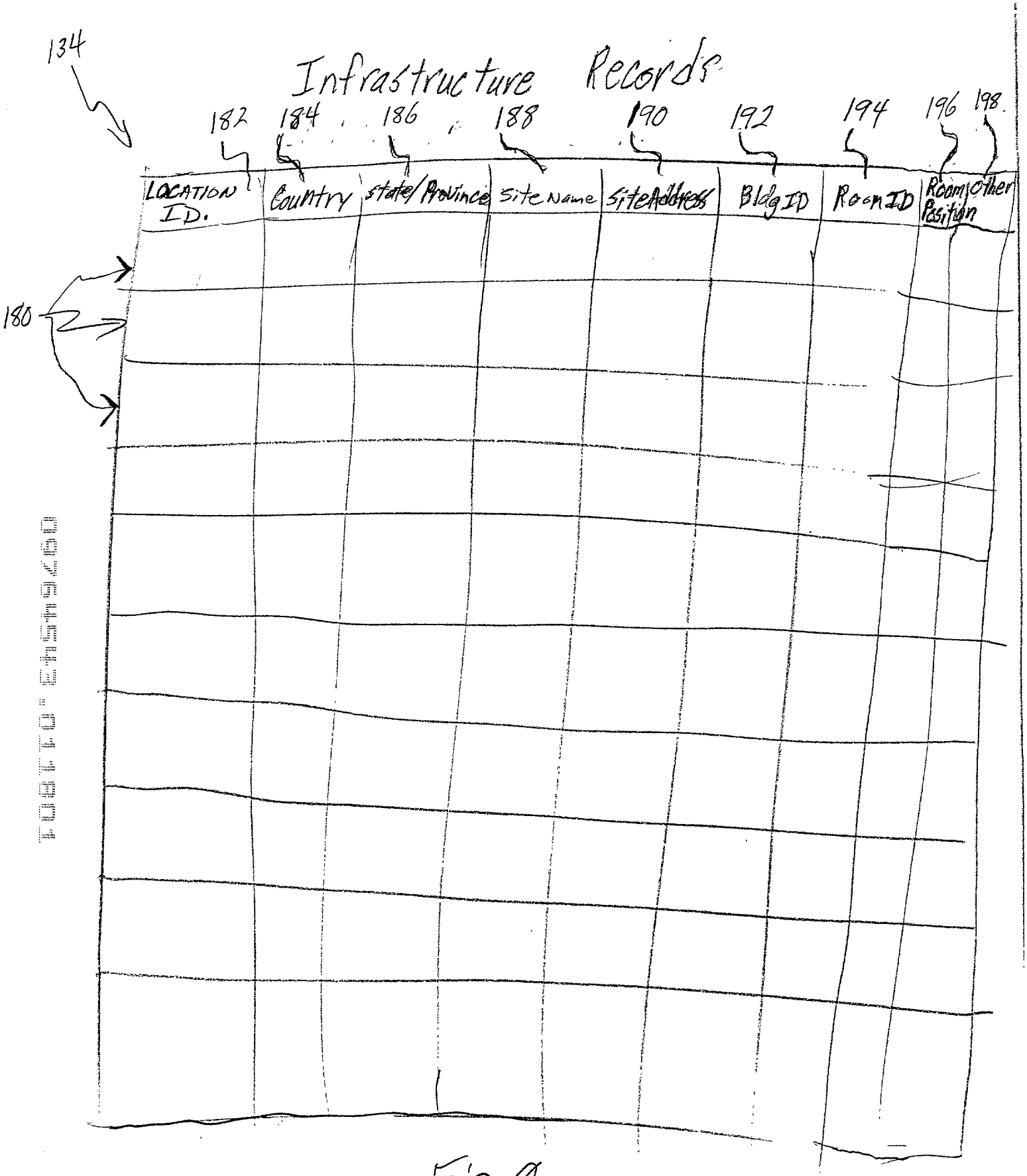
134
Infrastructure Records
182
184
186
188
190
192
194
196
198
LOCATION ID.
Country
State/Province
Site Name
Site Address
Bldg ID
Room ID
Room/Other Position
180

Fig. 8

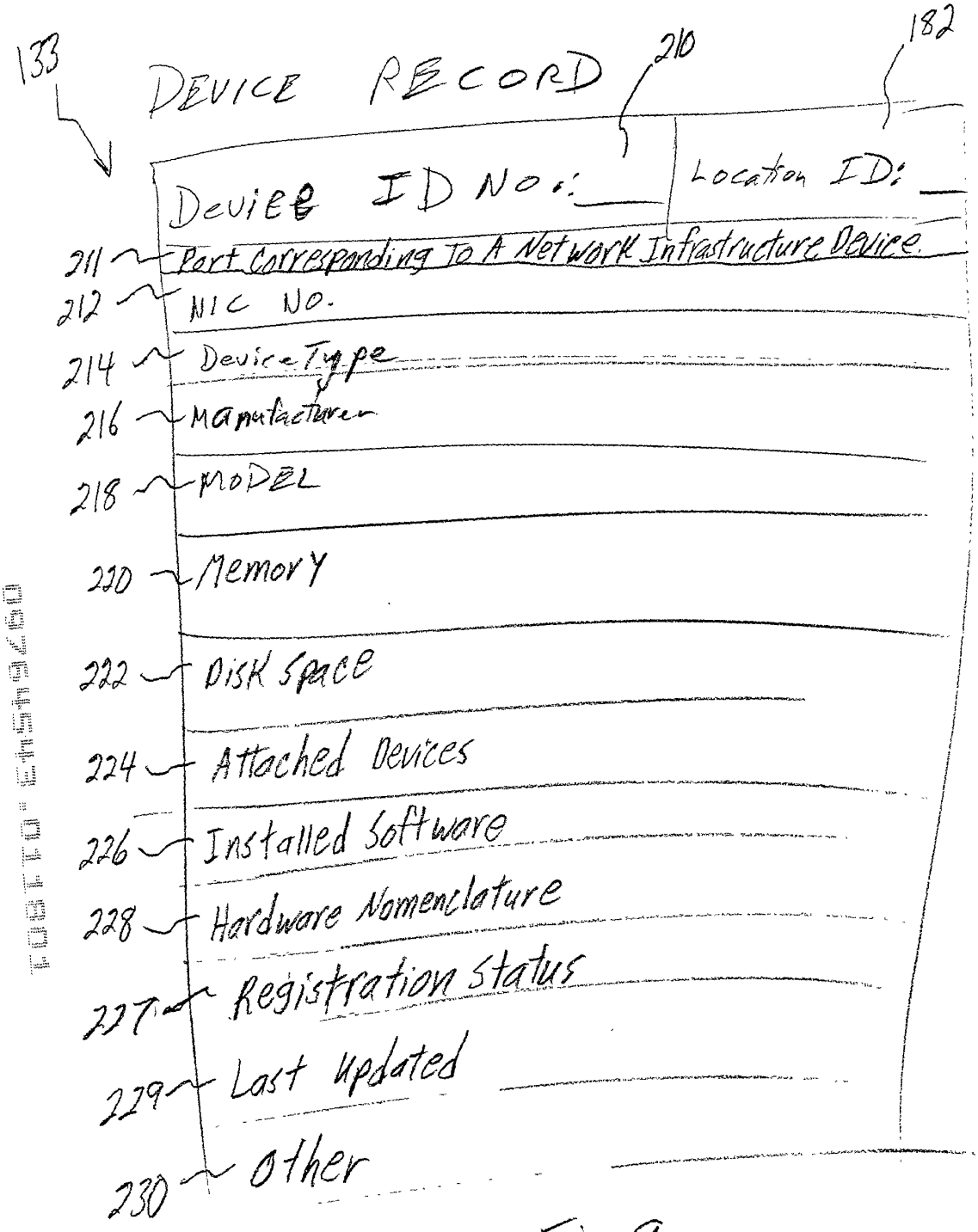
133
DEVICE RECORD
210
182
Device ID No.:
Location ID:
211 Port corresponding to A Network Infrastructure Device
212 NIC No.
214 Device Type
216 Manufacturer
218 MODEL
220 Memory
222 Disk Space
224 Attached Devices
226 Installed Software
228 Hardware Nomenclature
227 Registration Status
229 Last Updated
230 Other

Fig. 9

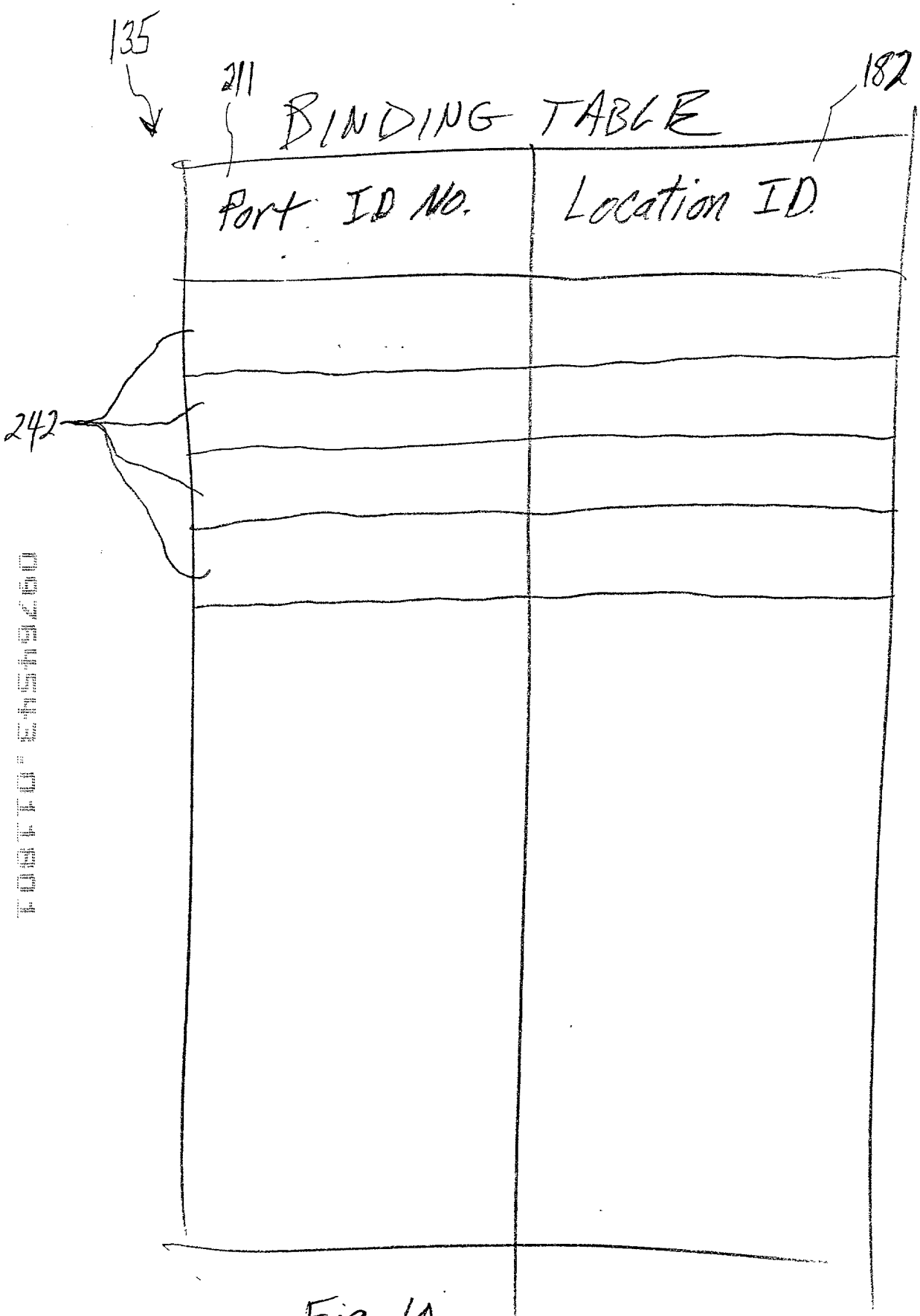

Fig. 10

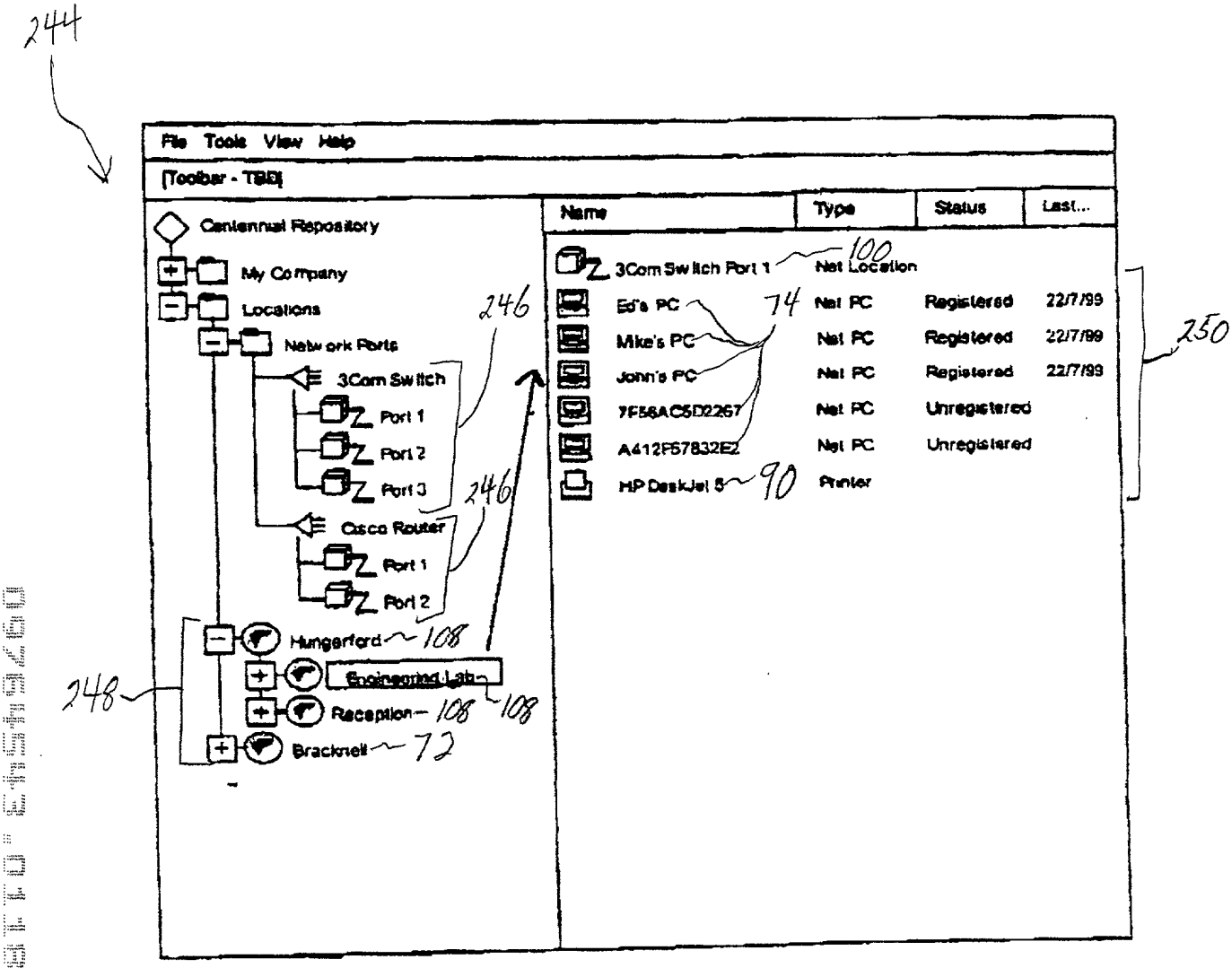
244
File Tools View Help
[Toolbar - TBD]
Centennial Repository
My Company
Locations
Network Ports
3Com Switch
Port 1
Port 2
Port 3
Cisco Router
Port 1
Port 2
Hungerford
Engineering Lab
Reception
Bracknell
246
246
248
108
108
72
Name
Type
Status
Last...
3Com Switch Port 1
100
Net Location
Ed's PC
74
Net PC
Registered
22/7/99
Mike's PC
Net PC
Registered
22/7/99
John's PC
Net PC
Registered
22/7/99
7F56AC5D2267
Net PC
Unregistered
A412F57832E2
Net PC
Unregistered
HP DeskJet 5
90
Printer
250

Fig 11

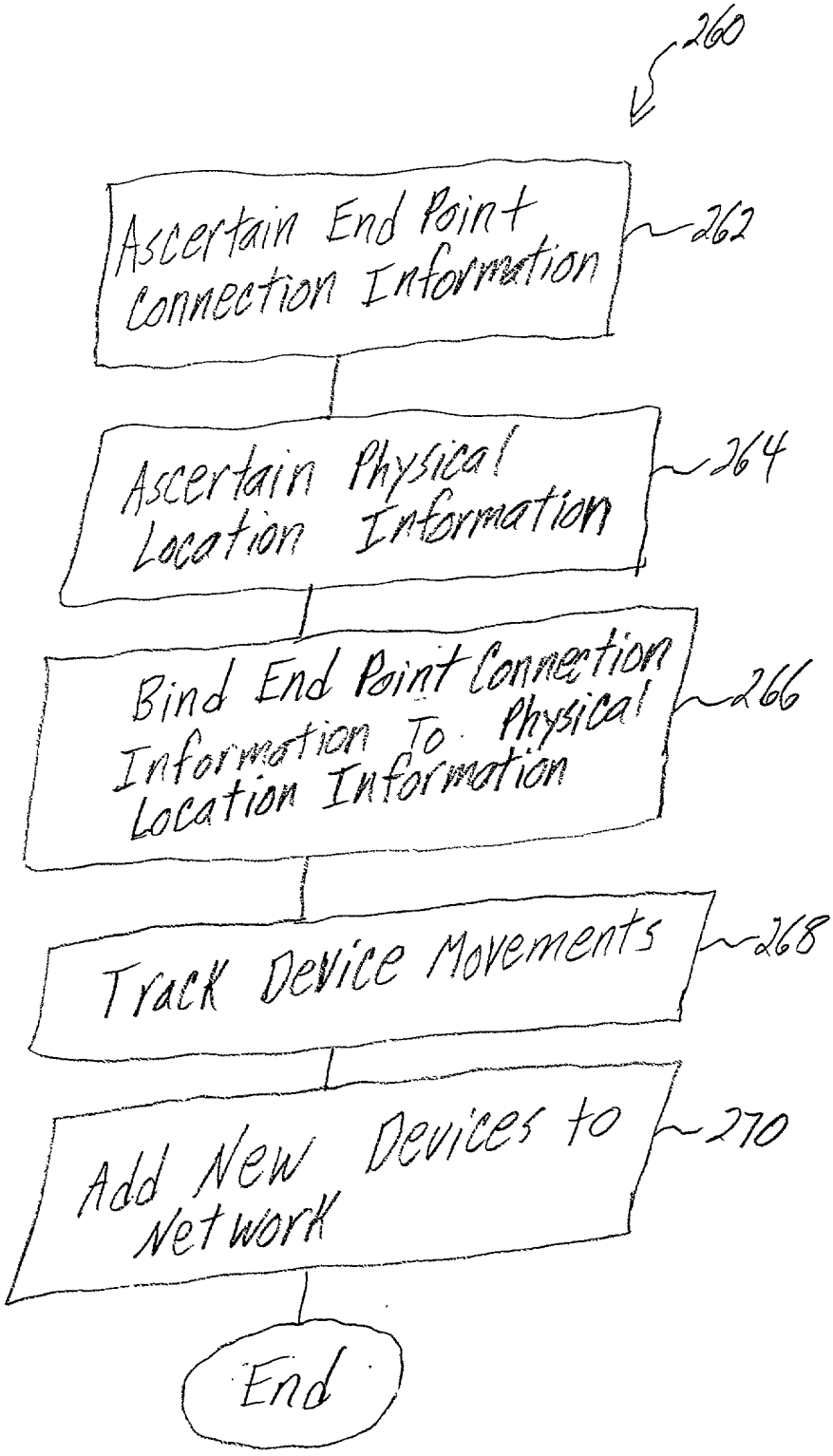
260
Ascertain End Point Connection Information
262
Ascertain Physical Location Information
264
Bind End Point Connection Information To Physical Location Information
266
Track Device Movements
268
Add New Devices to Network
270
End

Fig. 12

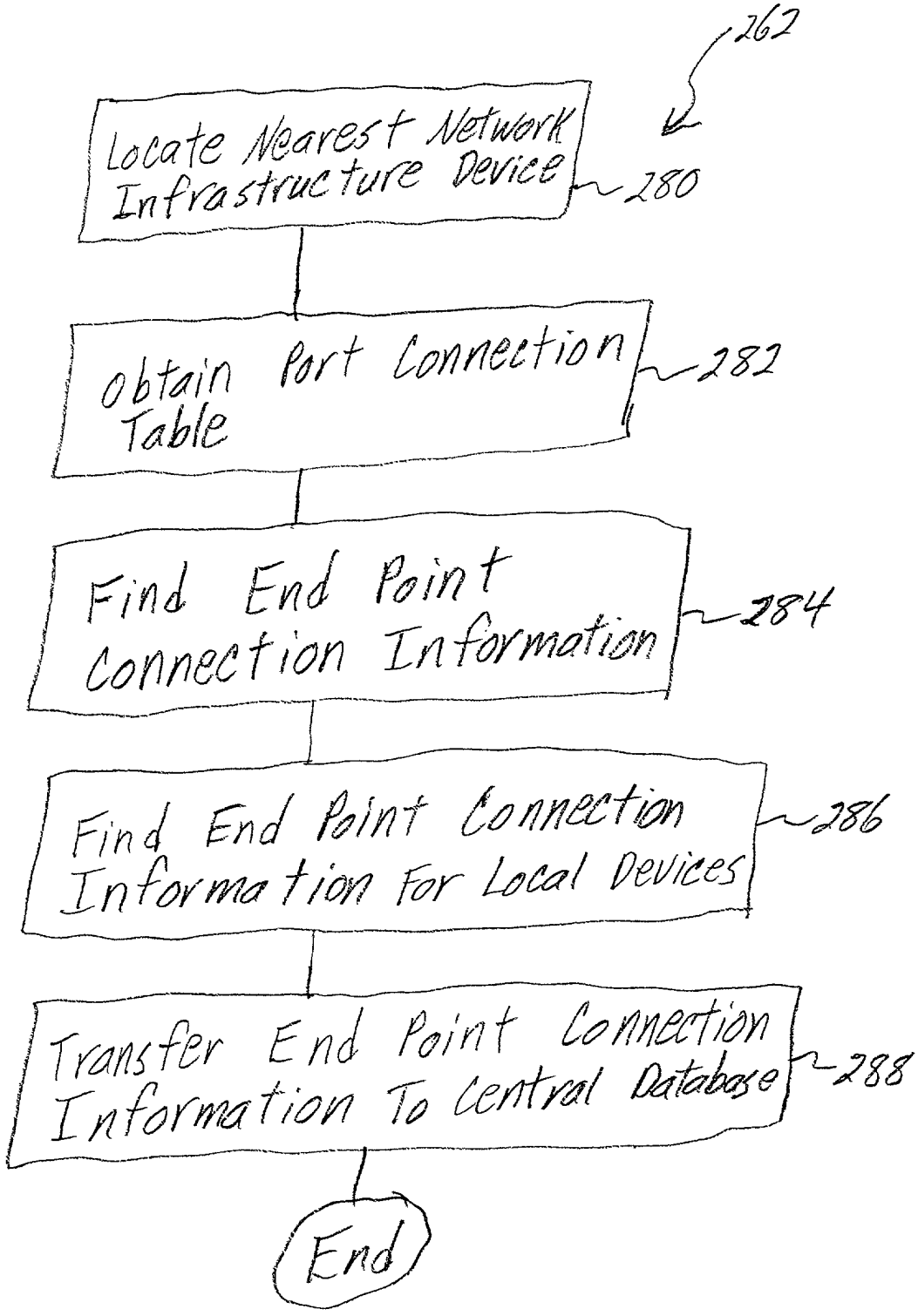
262
Locate Nearest Network Infrastructure Device
280
obtain Port Connection Table
282
Find End Point Connection Information
284
Find End Point Connection Information For Local Devices
286
Transfer End Point Connection Information To Central Database
288
End

Fig. 13

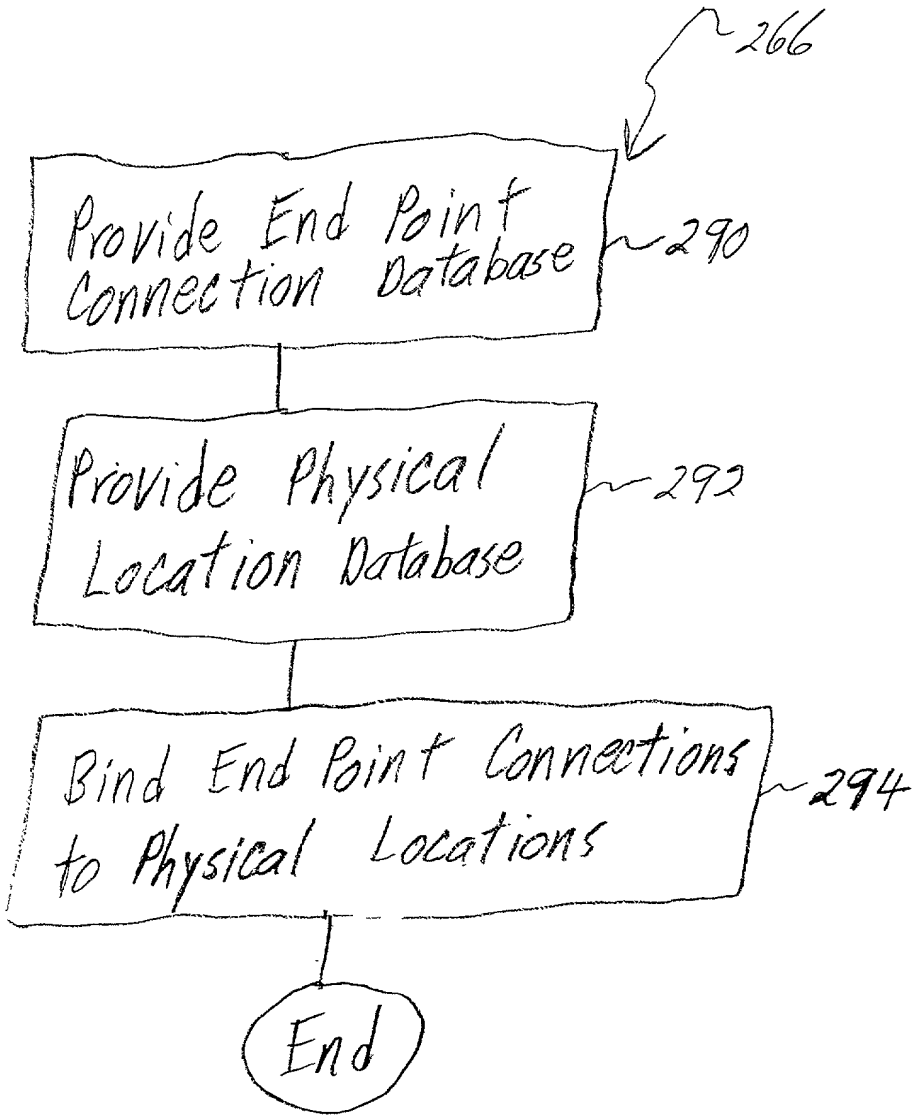
266
Provide End Point Connection Database
290
Provide Physical Location Database
292
Bind End Point Connections to Physical Locations
294
End

Fig. 14

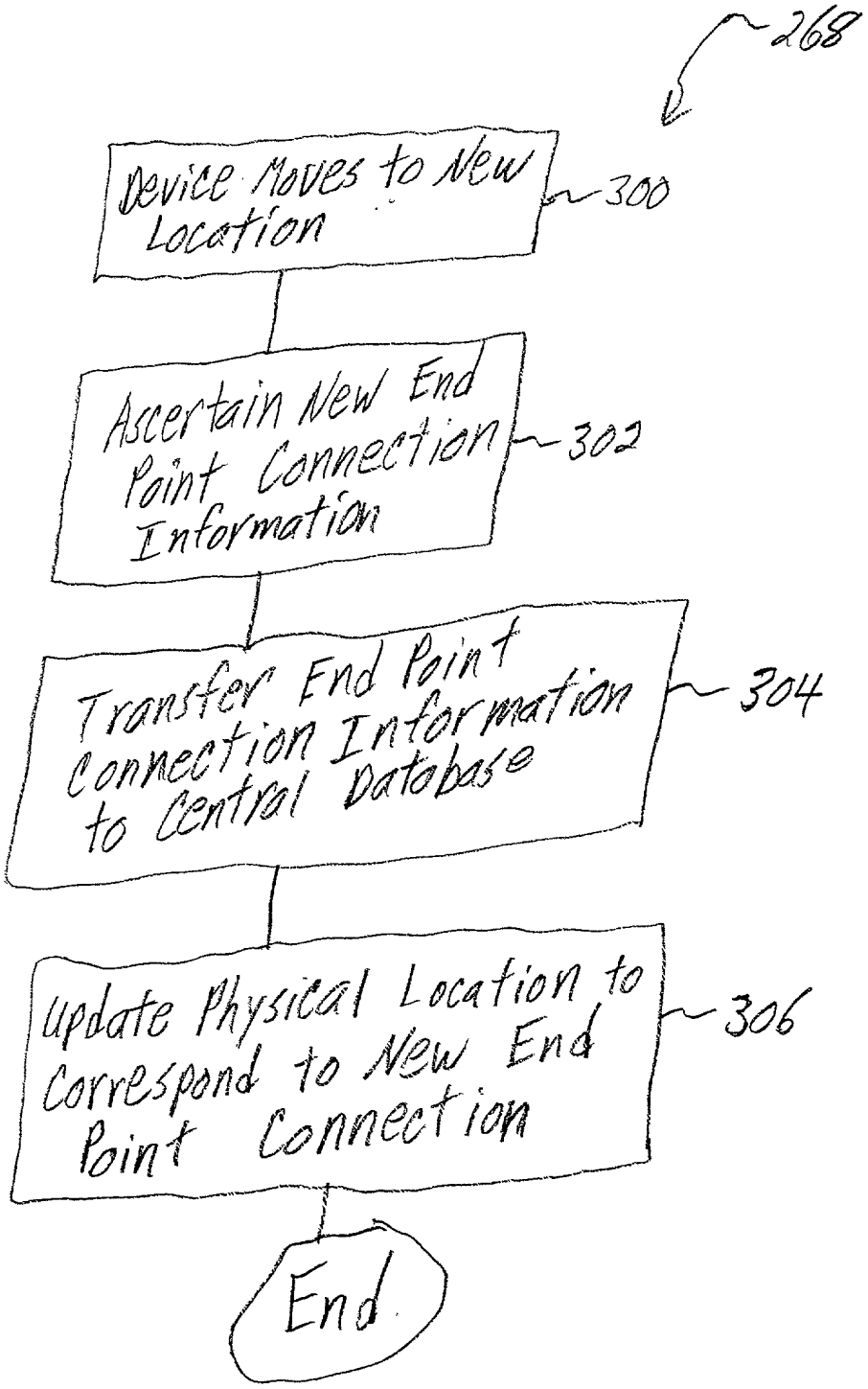
268
Device Moves to New Location
300
Ascertain New End Point Connection Information
302
Transfer End Point Connection Information to Central Database
304
Update Physical Location to Correspond to New End Point Connection
306
End

Fig. 15